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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,237	08/26/2003	Kazunori Yamanaka	031031	1743

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EXAMINER	
LEE, BENNY T	

ART UNIT	PAPER NUMBER
2817	

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), ~~days~~ from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☒ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice re Patent Drawing, PTO-948.
3. ☒ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of Informal Patent Application, Form PTO-152
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____

Part II SUMMARY OF ACTION

1. ☒ Claims 1-21 are pending in the application.

   Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☒ Claims 1-3, 6-10, 20, 21 are rejected.

5. ☒ Claims 4, 5, 13-19 are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____. has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).

12. ☒ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☒ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

PTOL-326 (Rev.9-89)

EXAMINER'S ACTION

SN 647237

U.S.GPO:1990-259-282

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms, which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: Page 1, lines 21, 22, "the size inside small to a size of" needs rephrasing. Page 3, lines 1, 8, 9, "easy to line 25, "to attain small...". Page 12, line 1, excepting".

The disclosure is objected to because of the following informalities: Page 1, line 19, note that "base" should properly be "basis." Page 2, lines 7, 8, note that "in the lose described above" is vague in meaning. Page 3, lines 6, 7, note that "several 10K or more" is vague in meaning. Page 6, lines 12, 22, note that "indium 102" appears to be an incomplete recitation (i.e. indium what); line 16, not that "M1.2." is vague in meaning. Page 8, line 3, note that "a lump" appears to be an incomplete recitation (i.e. "lump of" what?). Page 11, note that "bent" should properly be "bend" at all occurrences. Page 11, line 19, note that "parallele piped" is the correct spelling. Page 17, note that parameters (n, k, m, p) in the formulae should be subscripted. Note that "FIG. 3" needs a detail description.

Appropriate correction is required.

The use of the trademark Kovar and Invar (p. 11, l. 7) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claims 2, 6, 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, note that it is unclear which "surface" is intended by "the surface".

In claim 6, note that it is unclear with respect to what feature is "the portion" associated.

Claim 6 is contains the trademark/trade name Kovar and Invar. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe *** and, accordingly, the identification/description is indefinite.

The following clams have been found objectionable for reasons set forth below:

In claims 1, 2, 4, 6, 7, 10, note that "formed" should be rewritten as --disposed-- each occurrence.

In claims 3, 9, note that parameters (n, k, m, p) need to be subscripted.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 7, 8, 10, 20, 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Matsuura et al.

Matsuura et al discloses a dielectric substrate or block (20) of Mg0 (col. 3, ls 35, 36) which is of a single crystal (col. 3 l. 58) and having (100) surface (col. 3, l. 56) upon which an oxide superconductive film (e.g. $Y_1 Ba_2 Cu_3 O_7$ film 10) is deposited (col. 3, l. 55) by sputtering or laser evaporation (col. 3, ls 33, 34). Note that the oxide superconductive film has a c-axis orientation which is perpendicular to the surface (col. 2, ls 66, 67). Moreover, note that the MgO block (20) is affixed to a pedestal or bottom cover (50c) and secured by a fixture (i.e. wall 52) which forceably pushes the dielectric block into a fixed position on the pedestal (col. 5, ls 10-13). As for the preamble limitation of a "dielectric waveguide", it should be noted that the dielectric block in conjunction with the oxide superconductive film collectively functions to propagate electromagnetic energy, thereby defining at least the dielectric block as a waveguide within its broadest reasonable interpretation.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura et al.

Note that Matsuura et al discloses the claimed invention except for the fixture and pedestal being comprised of brass". Although Matsuura et al is silent as to the material of pedestal (50c) and fixture (52), it would have been evident to one of ordinary skill in the art that suitable and equivalent conductive materials (e.g. brass) for the conductive structures would obviously have been usable, especially in view of the generic teaching in Matsurra et al.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ishikawa et al pertains to dielectric waveguides with superconductive electrodes.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (571)272-1764.

Benny Lee

BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817